

Field Mobility to Organizational Data Workflows

Integrating Field Apps, Operations Dashboards, into Organizational Data Flows – Foresters Perspective

David Herries
Director / GM



INTERPINE

Bringing innovation to the forest industry

Field Mobility to Organizational Data Workflows

Integrating Field Apps, Operations Dashboards, into Organizational Data Flows – Foresters Perspective

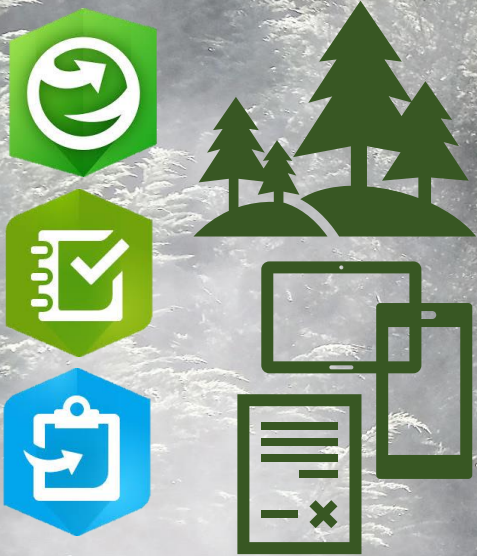
David Herries
Director / GM



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Field Mobility



Operations Dashboards
and Maps



Organizational Databases
and Reporting



esri

Partner Network
Silver



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Who Are We ? How Are We Using GIS ?

Shaping Today's Forests with the Technology of Tomorrow



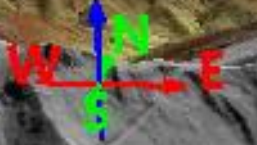


changed the way we see the forest

current active forestry specific LiDAR program for 2019

1.4 million ha

enhanced forest inventory through use of machine learning

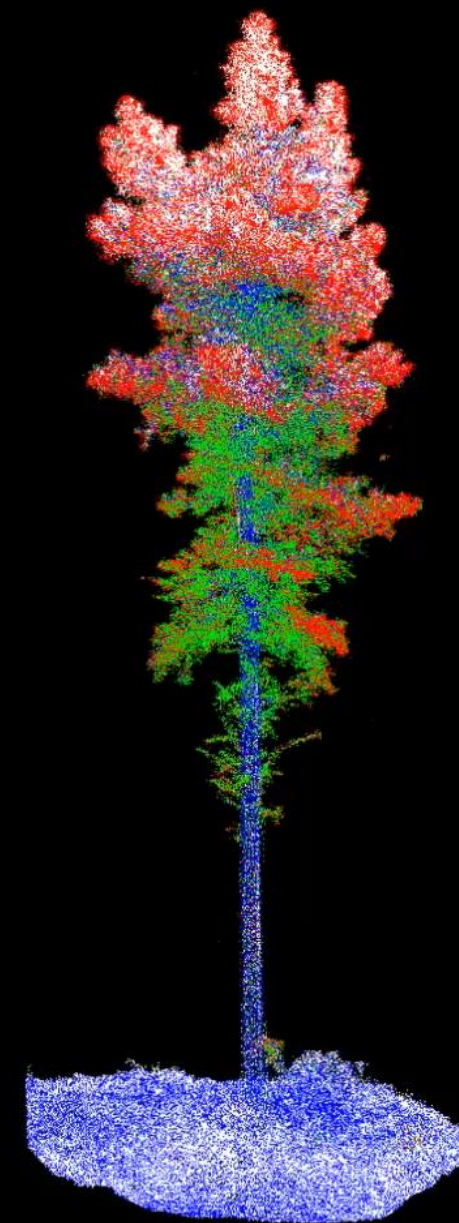
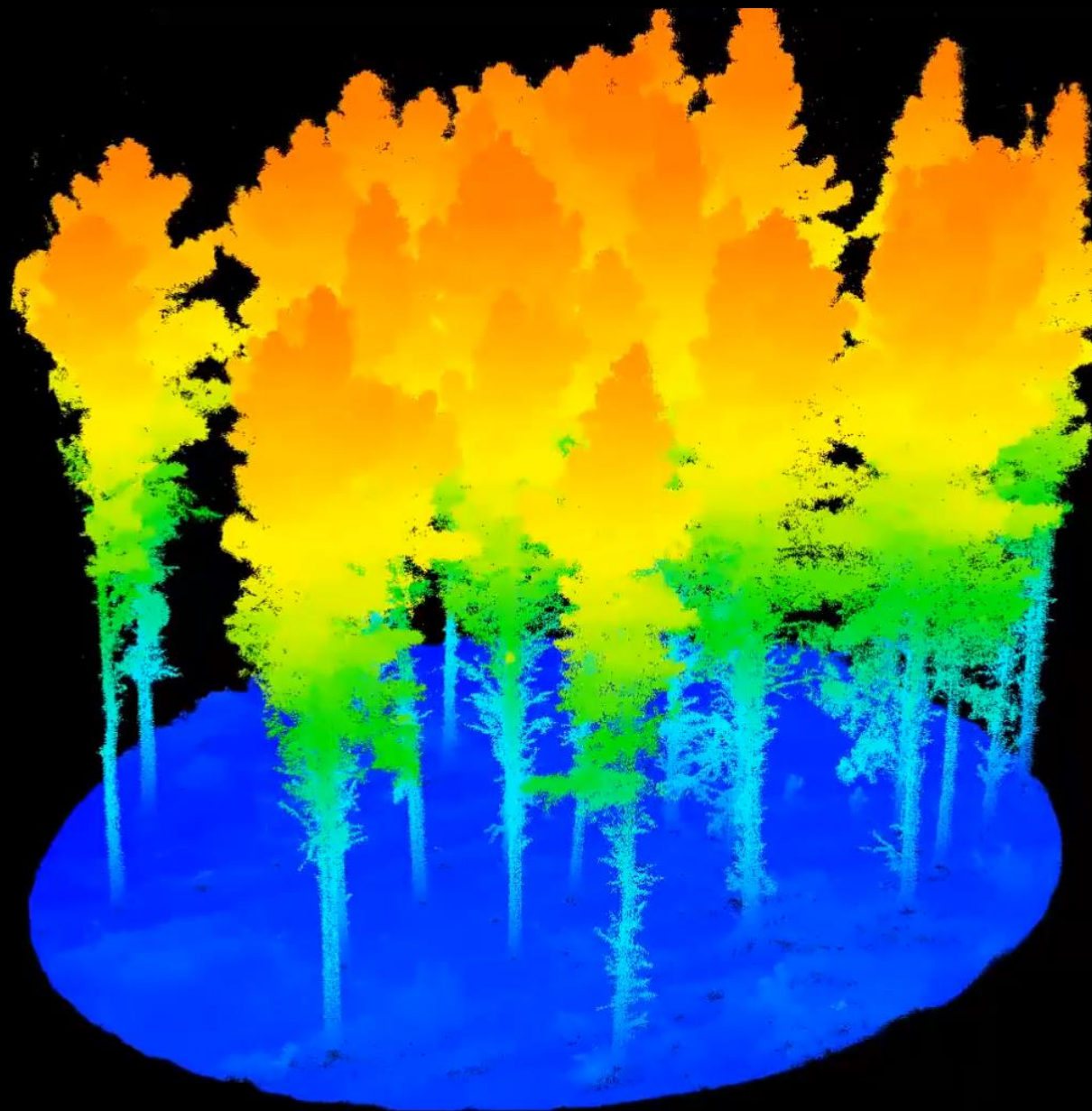
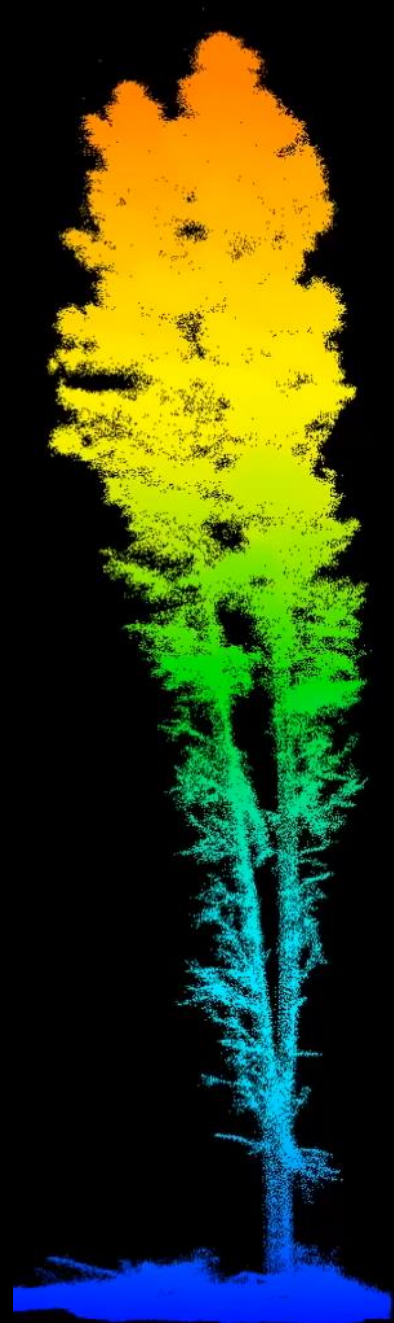


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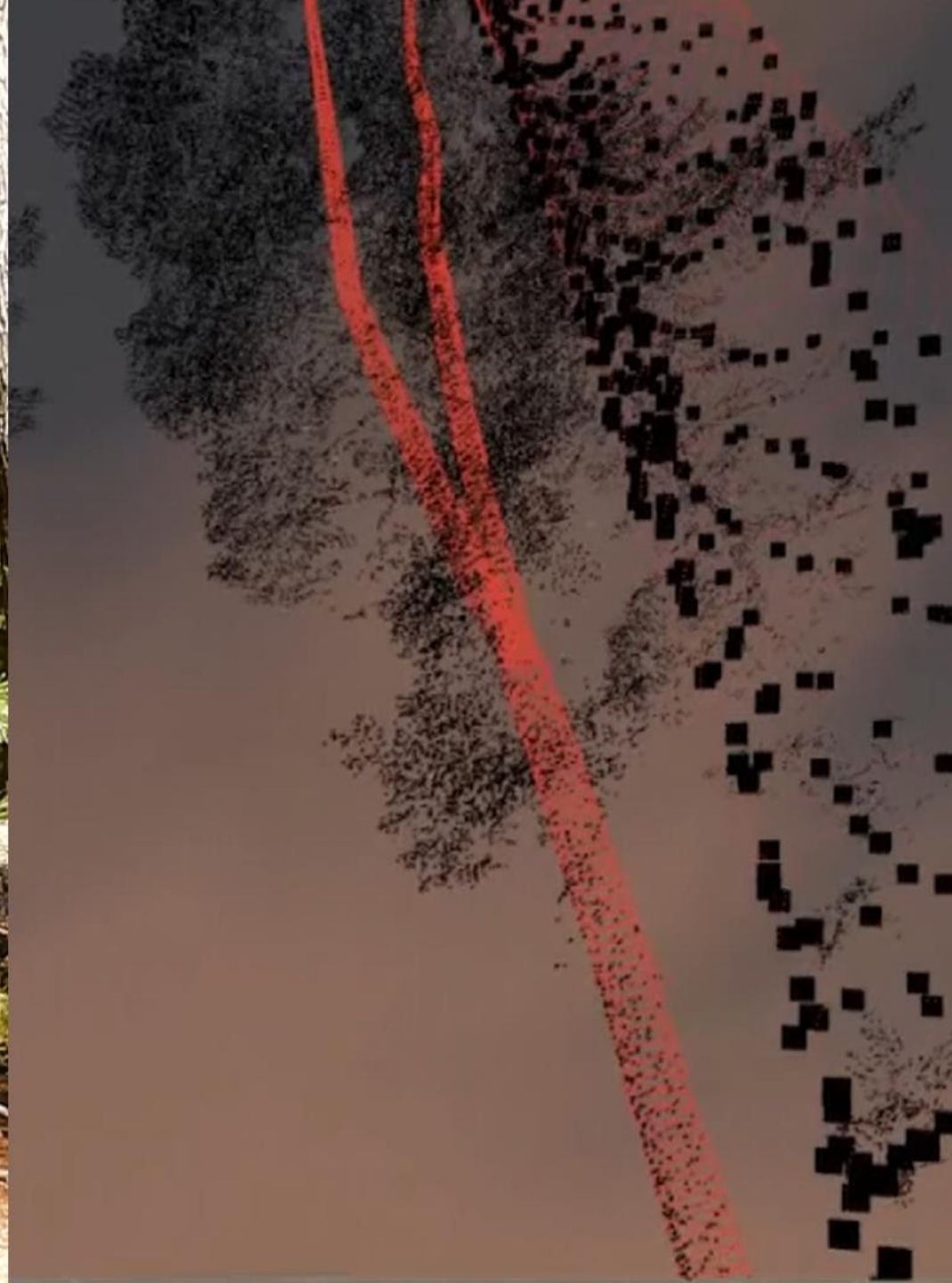






Return
FIRST
INTERMEDIATE
LAST
ONLY

7,700 pulses per m2, up to 11 returns per pulse



DELETE MODE

S8P15

Dataset: S8P15_60

Current Mode: Delete Mode

Up 1 Up 10

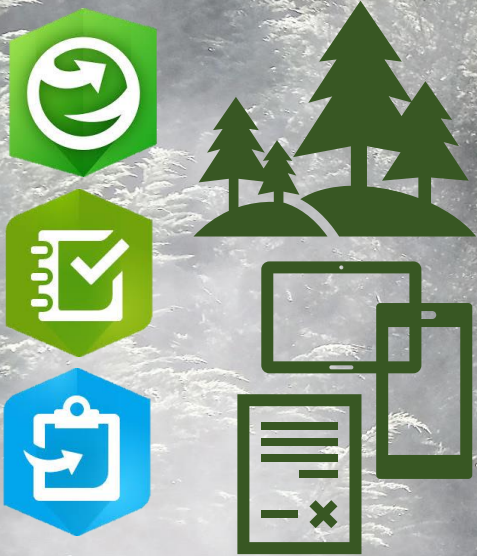
Apply

Copy Height

100%

On 1 On 10

Field Mobility



Operations Dashboards
and Maps



Organizational Databases
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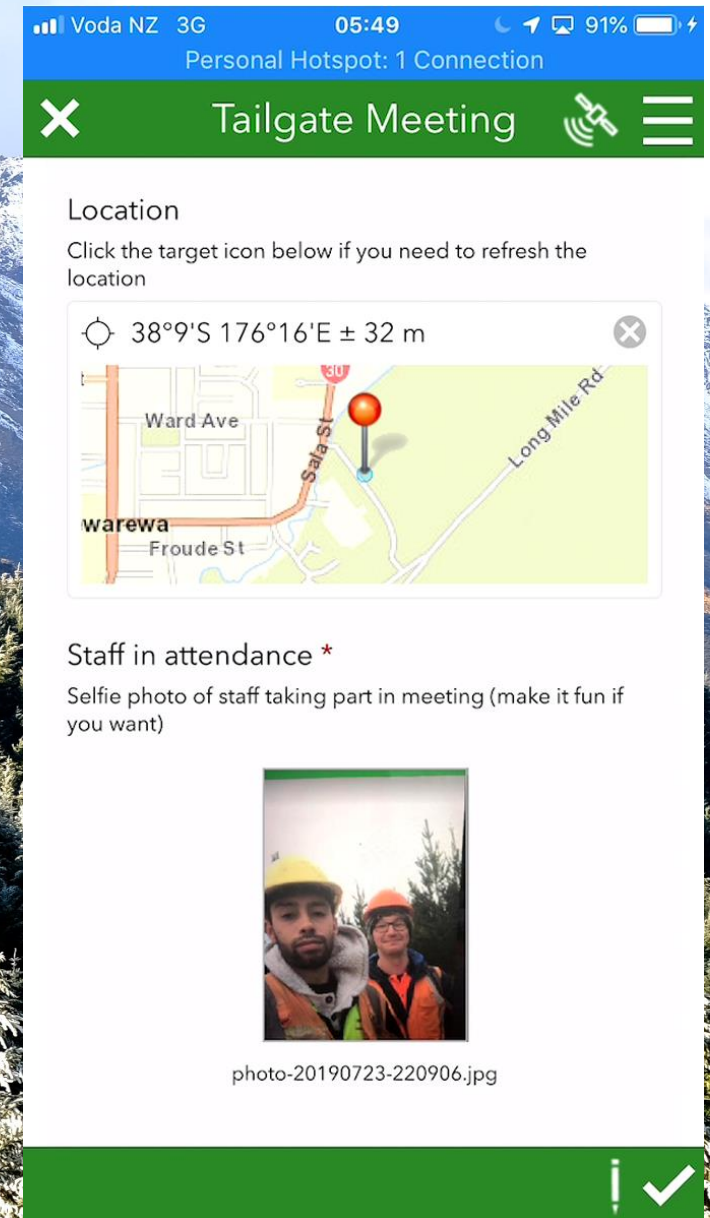
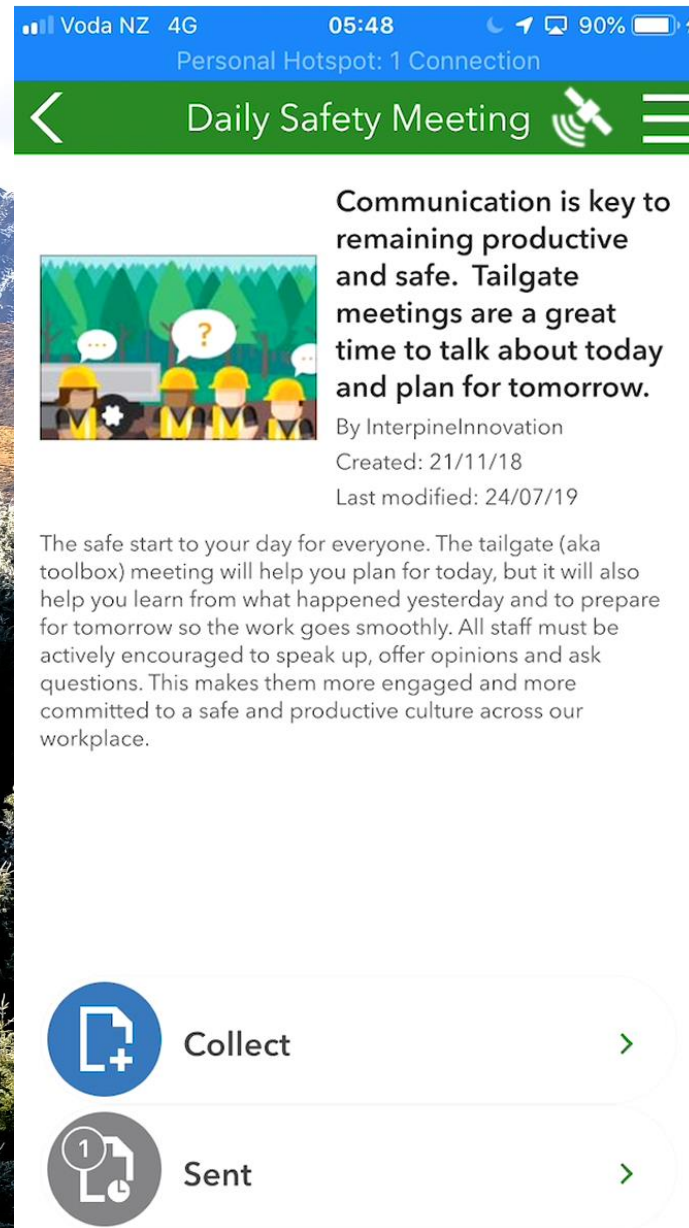
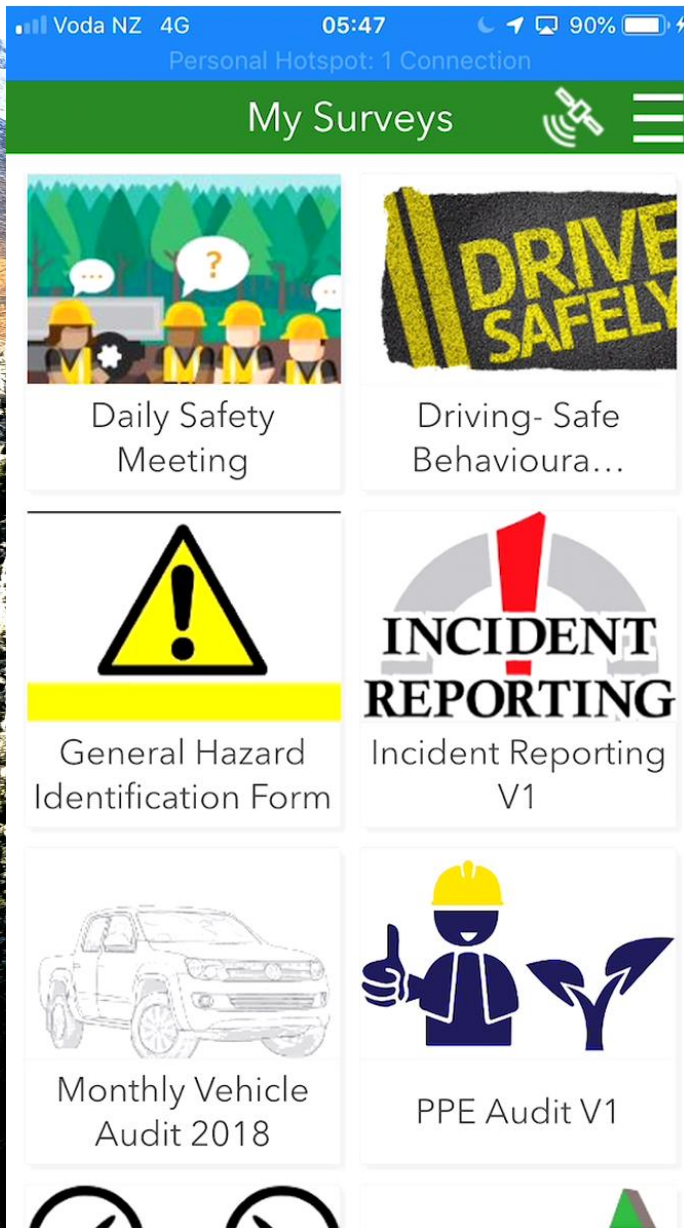


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Field Mobility





Daily Safety Meeting

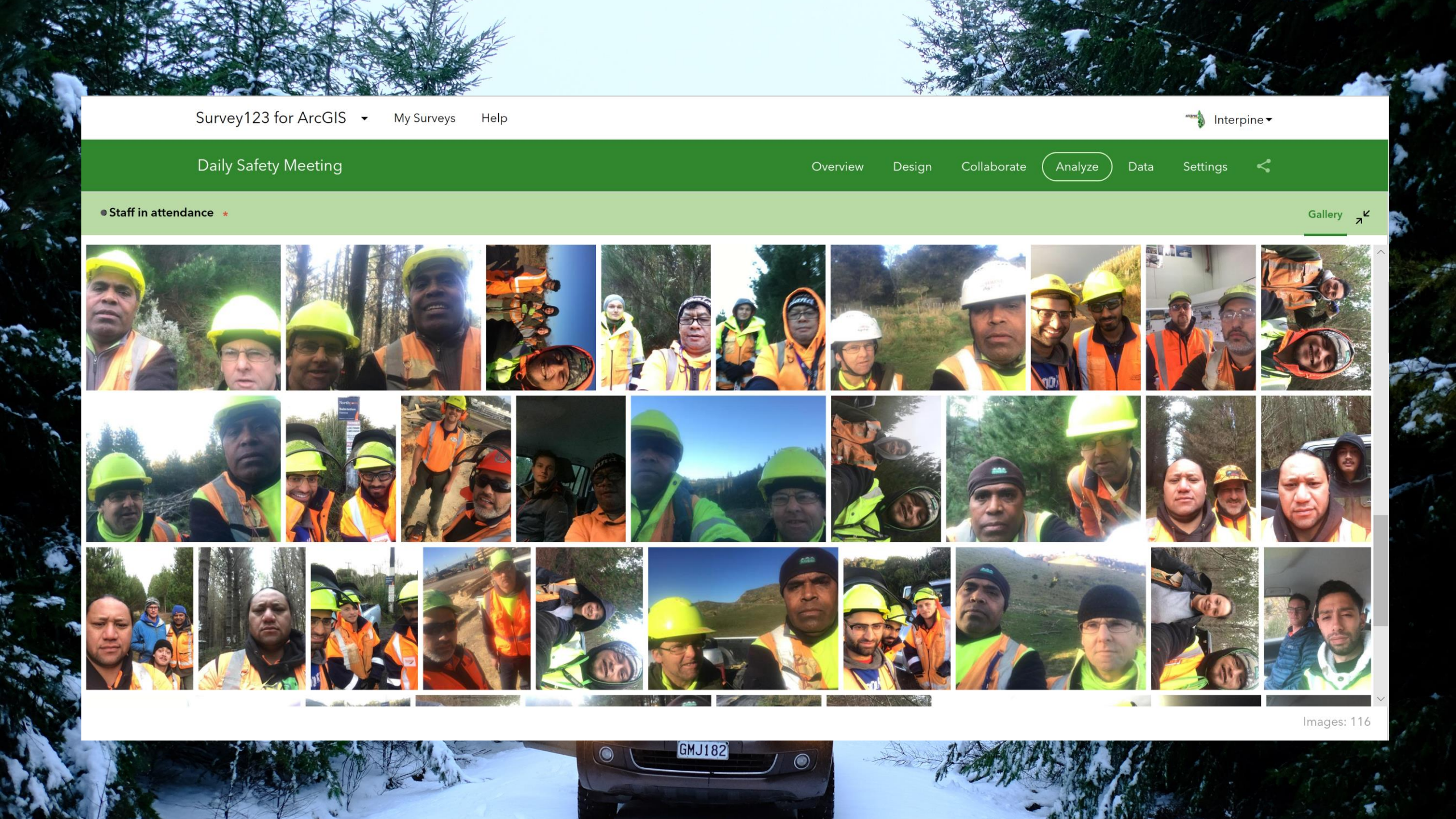
Overview Design Collaborate Analyze Data Settings ↗

● Staff in attendance ★

Gallery ↗



Images: 116



- **Workplan comments**
- **Word cloud**

Word cloud

[Hide table](#)

Show responses



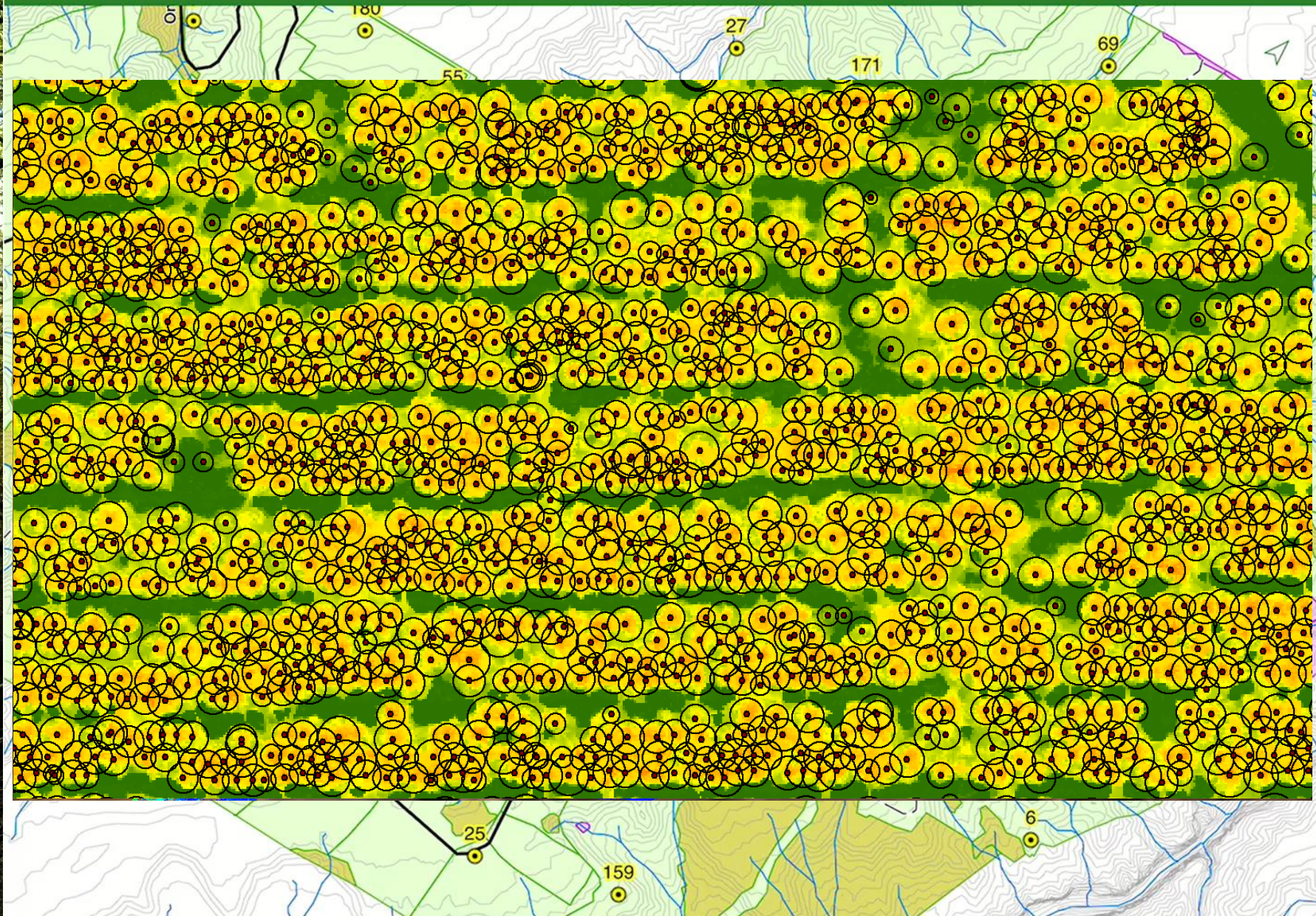
Field Mobility

6:08 AM Tue 13 Aug

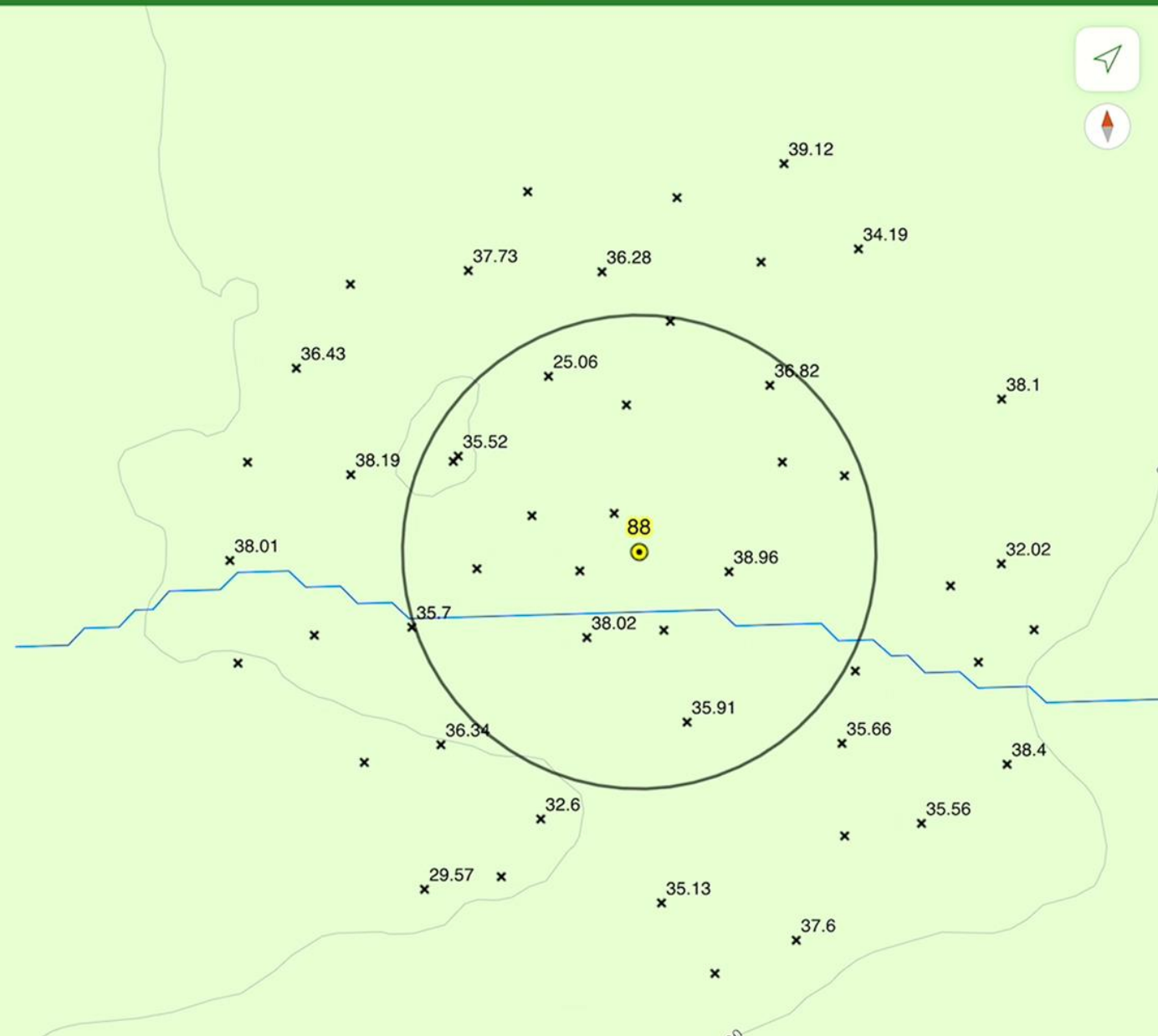
100%

Maps

PBL LiDAR CNI 2019



PBL LiDAR CNI 2019



Port Blakely PSP 2019

Overview

Design

Collaborate

Analyze

Data

Settings



Photo of Centre Peg ★

Gallery ↗



Images: 58

Survey123 for ArcGIS

My Survey

Port Blakely PSP 2019

Photo of Centre Peg ★



Interpine

Collaborate

Analyze

Data

Settings



Gallery ↗



Images: 58

Timberlands Age10 2019

Overview

Design

Collaborate

Analyze

6/17/19 - 8/13/19

Filter

Set visibility

Print current view



Bird Observation Template 11/06/19

by InterpinelInnovation



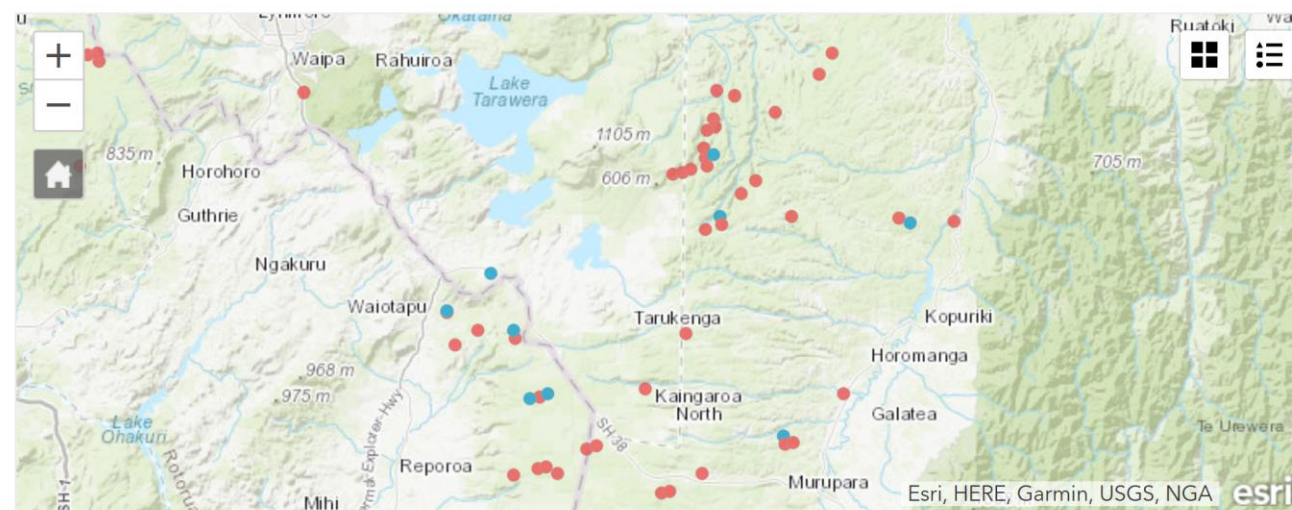
Bird Observation *

Column

Bar

Pie

Map



[Hide table](#)

Planting QC Form

PLOT SIZE

0.04

SLOPE

Degrees

0

RADIUS slope adjusted

Metres

11.28

TREE COUNT

0

SPH

Target 1250 sph, Max 1325sph Min 1050sph

0

ROOTS UP

-

0

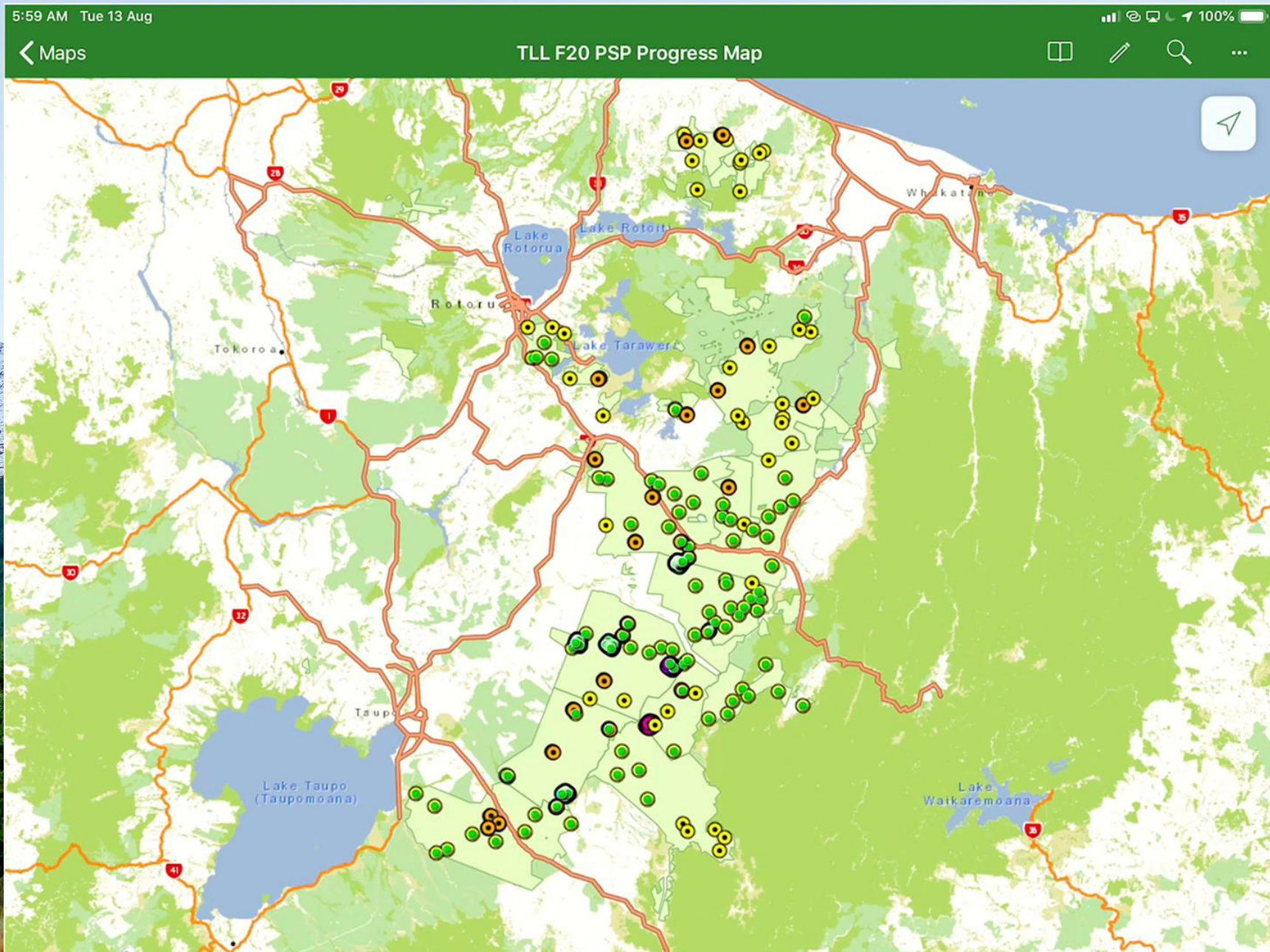
×

+





Operations Dashboards
and Maps



TLL 2019 PSP Inventory Progress

Filters

Select Date Range



Day Filter

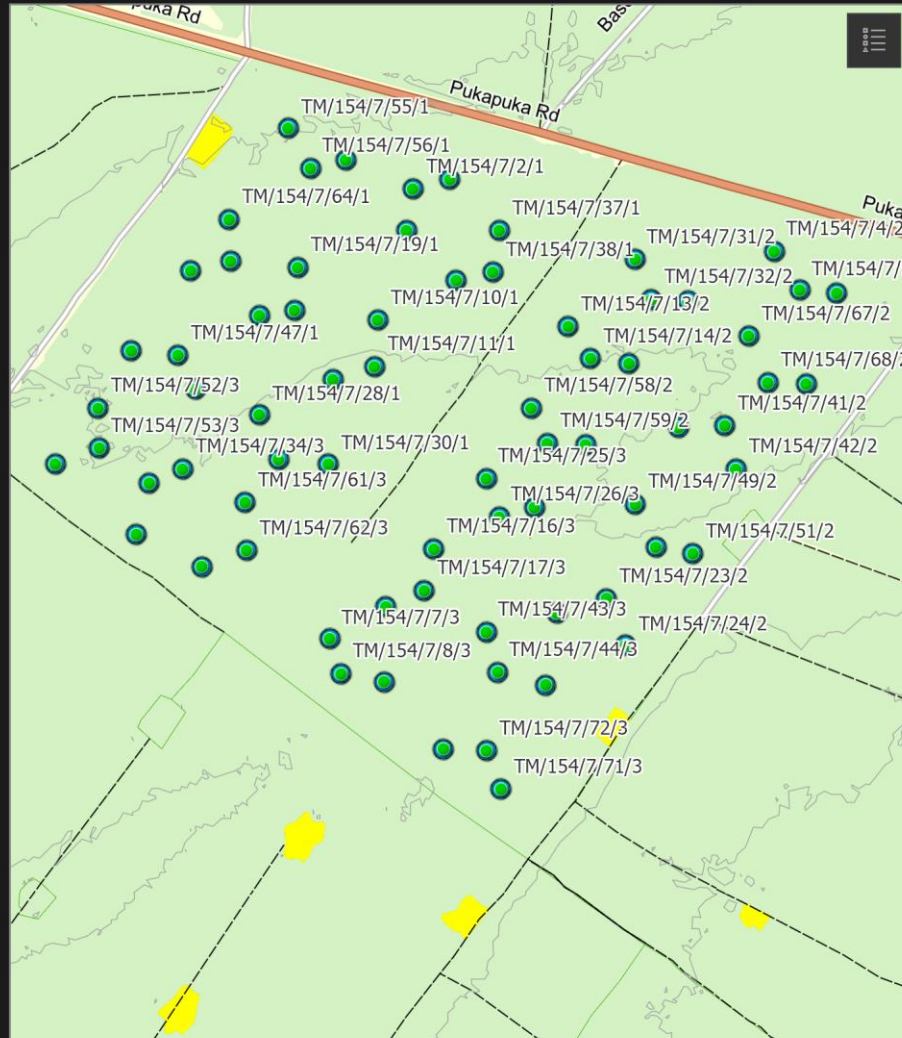


CREW LEADER

None

Plot Selector

None



Total Plots Completed



Last update: a minute ago

Filtered Completed Plots

391

Last update: a minute ago

2 of 61

Plot Pictures

nutrition trial not shown on drop down list

photo_peg-20190701-234817.jpg



1 of 2

Attachments

photo_peg-20190701-234817.jpg

photo_1-20190701-234850.jpg

Last update: a few seconds ago

LiDAR Inventory Progress

Filters

Select Date Range



Day Filter



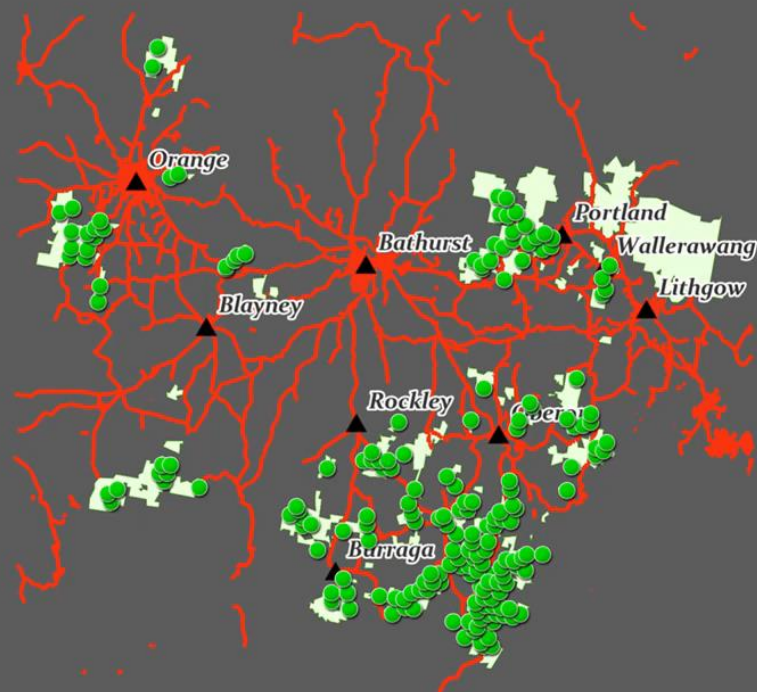
CREW LEADER

None



Plot Selector

None



Total Plots Completed



Last update: a minute ago

Filtered Completed Plots

197

Last update: a few seconds ago

1 of 197

Plot Pictures

Date & Time 6/7/2019, 4:51 PM

Measured

Plot Number MQ19LR55

Crew Leader AA

Initials

Trimble Points Yes

Collected

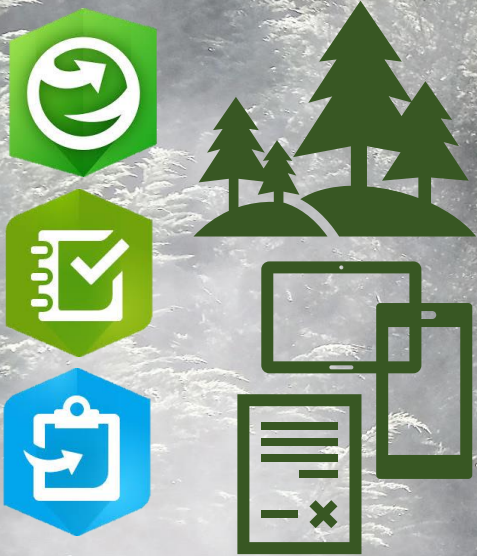
Plot Notes

NorthPicture-20190607-045209.jpg



Last update: a few seconds ago

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PowerPoint



OneNote



SharePoint



Teams



Yammer



Dynamics
365



Flow



Admin



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Pinned

Shared with me

Discover

↑ Upload and open...



Name

Last opened by you

Activity



Cloud Services Team Notebook ⓘ
SharePoint - Interpine Group Ltd » ... » SiteAssets

Wed at 11:28 PM



Power BI



Home



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Apps



Shared with me



Workspaces



My workspace



Get data

Export Share Subscribe Comments ...



Reset to default



Bookmarks



View

African Mahogany Forest and Age Class KPIs:

Age Class KPI

| Crop Age At Measurement | Forest | Measurement Year | Median Basal Area m2/ha | Median DBH | Median Height | Median SPH |
|-------------------------|---------------|------------------|-------------------------|------------|---------------|------------|
| 3 | Gypsy Springs | 2014 | 4.2 | 71 | 6.2 | 1070 |
| 3 | Gypsy Springs | 2015 | 3.3 | 67 | 5.3 | 940 |
| 3 | Kumbyechants | 2014 | 5.0 | 78 | 5.7 | 1050 |
| 3 | Kumbyechants | 2015 | 2.9 | 62 | 4.9 | 970 |
| 3 | Mentabie | 2017 | 2.4 | 68 | 4.8 | 650 |
| 3 | Stray Creek | 2014 | 1.2 | 41 | 3.6 | 920 |
| 4 | Gypsy Springs | 2014 | 5.0 | 110 | 7.5 | 530 |
| 4 | Gypsy Springs | 2015 | 6.0 | 85 | 7.2 | 1060 |
| 4 | Gypsy Springs | 2016 | 4.7 | 81 | 6.0 | 920 |
| 4 | Kumbyechants | 2014 | 6.6 | 120 | 8.1 | 580 |
| 4 | Kumbyechants | 2015 | 5.5 | 99 | 7.3 | 710 |
| 4 | Kumbyechants | 2016 | 4.8 | 80 | 5.6 | 950 |
| 4 | Mentabie | 2017 | 2.4 | 74 | 5.5 | 550 |
| 4 | Mentabie | 2018 | 1.9 | 94 | 6.4 | 270 |
| 4 | ROCKTEAR | 2019 | 6.0 | 91 | 7.2 | 930 |
| 4 | Stray Creek | 2014 | 4.0 | 75 | 6.0 | 910 |
| 4 | Stray Creek | 2015 | 1.6 | 48 | 4.2 | 880 |
| 4 | Stray Creek | 2016 | 1.7 | 45 | 3.9 | 1080 |
| 5 | Gypsy Springs | 2014 | 3.5 | 92 | 6.8 | 520 |
| 5 | Gypsy Springs | 2015 | 5.9 | 120 | 8.3 | 520 |
| 5 | Gypsy Springs | 2016 | 7.8 | 112 | 7.7 | 790 |
| 5 | Gypsy Springs | 2017 | 5.2 | 93 | 7.7 | 770 |
| 5 | Kumbyechants | 2015 | 8.3 | 135 | 9.0 | 580 |
| 5 | Kumbyechants | 2016 | 7.1 | 122 | 8.1 | 610 |
| 5 | Kumbyechants | 2017 | 4.2 | 126 | 7.6 | 340 |
| 5 | Mentabie | 2018 | 2.6 | 89 | 6.5 | 420 |
| 5 | Mentabie | 2019 | 2.7 | 112 | 7.4 | 270 |
| 5 | Stray Creek | 2014 | 3.9 | 80 | 6.0 | 770 |
| 5 | Stray Creek | 2015 | 4.9 | 85 | 6.7 | 870 |
| 5 | Stray Creek | 2016 | 1.9 | 54 | 4.2 | 840 |
| 5 | Stray Creek | 2017 | 2.5 | 54 | 4.7 | 1080 |
| 6 | Gypsy Springs | 2015 | 4.1 | 101 | 7.6 | 510 |
| 6 | Gypsy Springs | 2016 | 7.3 | 132 | 8.8 | 530 |
| 6 | Gypsy Springs | 2017 | 10.0 | 126 | 8.8 | 800 |
| 6 | Gypsy Springs | 2018 | 4.4 | 134 | 8.3 | 310 |

Year of Establishment KPI

| YOE | Forest | Measurement Year | Median Basal Area m2/ha | Median DBH | Median DBH CAI | Median Height | Median SPH |
|------|---------------|------------------|-------------------------|------------|----------------|---------------|------------|
| 2007 | Whatfor | 2018 | 12.5 | 153 | 9 | 10.5 | 680 |
| 2007 | Whatfor | 2019 | 14.0 | 162 | 5 | 10.3 | 680 |
| 2008 | Stray Creek | 2014 | 6.8 | 121 | 15 | 8.1 | 600 |
| 2008 | Stray Creek | 2015 | 7.8 | 131 | 10 | 8.8 | 580 |
| 2008 | Stray Creek | 2016 | 9.2 | 142 | 10 | 9.0 | 580 |
| 2008 | Stray Creek | 2017 | 10.1 | 150 | 8 | 9.8 | 570 |
| 2008 | Stray Creek | 2018 | 5.6 | 172 | 9 | 9.8 | 240 |
| 2008 | Stray Creek | 2019 | 6.1 | 180 | 8 | 10.0 | 240 |
| 2008 | Whatfor | 2018 | 11.2 | 117 | 7 | 8.9 | 1040 |
| 2008 | Whatfor | 2019 | 11.8 | 120 | 3 | 9.2 | 1040 |
| 2009 | Gypsy Springs | 2014 | 3.5 | 92 | 16 | 6.8 | 520 |
| 2009 | Gypsy Springs | 2015 | 4.1 | 101 | 8 | 7.6 | 510 |
| 2009 | Gypsy Springs | 2016 | 4.9 | 112 | 11 | 7.6 | 500 |
| 2009 | Gypsy Springs | 2017 | 5.7 | 123 | 8 | 8.6 | 480 |
| 2009 | Gypsy Springs | 2018 | 4.1 | 139 | 9 | 8.8 | 270 |
| 2009 | Gypsy Springs | 2019 | 4.5 | 151 | 7 | 9.0 | 250 |
| 2009 | Stray Creek | 2014 | 3.9 | 80 | 13 | 6.0 | 770 |
| 2009 | Stray Creek | 2015 | 4.6 | 89 | 9 | 6.7 | 740 |
| 2009 | Stray Creek | 2016 | 3.9 | 100 | 10 | 7.0 | 500 |
| 2009 | Stray Creek | 2017 | 4.4 | 119 | 12 | 7.7 | 400 |
| 2009 | Stray Creek | 2018 | 3.5 | 134 | 10 | 8.0 | 250 |
| 2009 | Stray Creek | 2019 | 3.9 | 141 | 7 | 8.1 | 250 |
| 2010 | Gypsy Springs | 2014 | 5.0 | 110 | 18 | 7.5 | 530 |
| 2010 | Gypsy Springs | 2015 | 5.9 | 120 | 10 | 8.3 | 520 |
| 2010 | Gypsy Springs | 2016 | 7.3 | 132 | 12 | 8.8 | 530 |
| 2010 | Gypsy Springs | 2017 | 8.6 | 144 | 10 | 9.6 | 530 |
| 2010 | Gypsy Springs | 2018 | 9.8 | 155 | 11 | 9.8 | 520 |
| 2010 | Gypsy Springs | 2019 | 5.9 | 170 | 7 | 9.9 | 260 |
| 2010 | Kumbyechants | 2014 | 6.6 | 120 | 25 | 8.1 | 580 |
| 2010 | Kumbyechants | 2015 | 8.3 | 135 | 15 | 9.0 | 580 |
| 2010 | Kumbyechants | 2016 | 9.0 | 153 | 17 | 9.6 | 490 |
| 2010 | Kumbyechants | 2017 | 10.8 | 164 | 12 | 10.6 | 510 |
| 2010 | Kumbyechants | 2018 | 12.3 | 177 | 13 | 11.1 | 500 |
| 2010 | Kumbyechants | 2019 | 9.3 | 195 | 8 | 11.9 | 310 |
| 2010 | Rocktear | 2016 | 6.6 | 110 | 13 | 7.1 | 690 |

Forest KPI

| Forest | Measurement Year | Median Basal Area m2/ha | Median DBH | Median SPH |
|---------------|------------------|-------------------------|------------|------------|
| Gypsy Springs | 2013 | 4.1 | 79 | |
| Gypsy Springs | 2014 | 4.0 | 93 | |
| Gypsy Springs | 2015 | 4.3 | 90 | |
| Gypsy Springs | 2016 | 5.5 | 106 | |
| Gypsy Springs | 2017 | 6.7 | 123 | |
| Gypsy Springs | 2018 | 6.9 | 145 | |
| Gypsy Springs | 2019 | 5.1 | 158 | |
| Kumbyechants | 2013 | 2.7 | 58 | |
| Kumbyechants | 2014 | 5.1 | 80 | |
| Kumbyechants | 2015 | 5.2 | 86 | |
| Kumbyechants | 2016 | 7.4 | 108 | |
| Kumbyechants | 2017 | 7.7 | 123 | |
| Kumbyechants | 2018 | 9.6 | 161 | |
| Kumbyechants | 2019 | 7.9 | 180 | |
| Mentabie | 2016 | 1.2 | 48 | |
| Mentabie | 2017 | 2.5 | 71 | |
| Mentabie | 2018 | 2.7 | 92 | |
| Mentabie | 2019 | 2.3 | 104 | |
| Rocktear | 2015 | 4.9 | 94 | |
| Rocktear | 2016 | 6.6 | 110 | |
| Rocktear | 2017 | 8.3 | 124 | |
| Rocktear | 2018 | 7.5 | 104 | |
| Rocktear | 2019 | 7.5 | 105 | |
| Stray Creek | 2013 | 4.2 | 86 | |
| Stray Creek | 2014 | 4.2 | 83 | |
| Stray Creek | 2015 | 4.7 | 89 | |
| Stray Creek | 2016 | 4.9 | 100 | |
| Stray Creek | 2017 | 5.2 | 118 | |
| Stray Creek | 2018 | 3.4 | 129 | |
| Stray Creek | 2019 | 4.2 | 143 | |
| Whatfor | 2015 | 7.9 | 97 | |
| Whatfor | 2017 | 10.6 | 113 | |
| Whatfor | 2018 | 9.3 | 132 | |
| Whatfor | 2019 | 10.9 | 143 | |

Filters



Interpine Inventory Teams

April 2019



Total Crew Days Worked

CURRENT MONTH

115

Productive Hours Per Day

BY TEAM LEADER



Average Plots Per Day 1

BY TEAM LEADER



Work Program Location

BY CREW DAYS



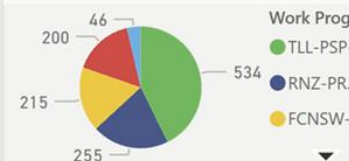
Average Minutes Per Plot

BY WORK TYPE



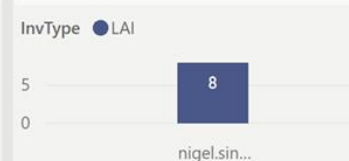
Total Planned Plots

BY WORK PROGRAM



Average Plots Per Day 2

BY TEAM LEADER



Elapsed Days Measure to Upload

BY TEAM LEADER

Month July 2019



Crew Days Worked

BY TEAM LEADER

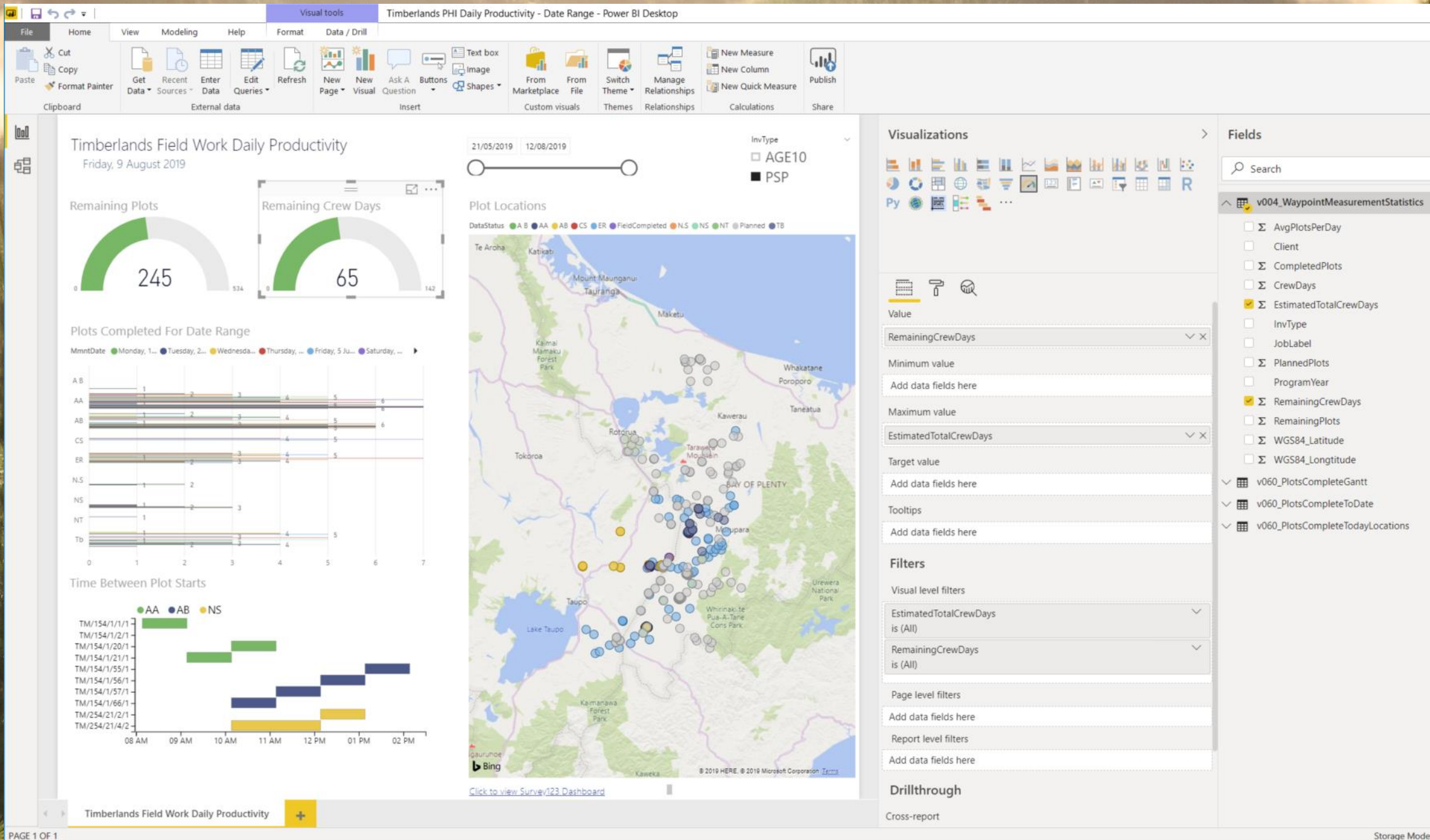


Work Days Remaining











BY WORK PROGRAM


| Job | Plots/Day | 1 Crew | 2 Crews | 3 Crews |
|--------------------|-----------|--------|---------|---------|
| FCNSW-LIDAR-AUS | 3.6 | 5 | 3 | 2 |
| PORTBLAKELY-LIDAR | 2.8 | 15 | 7 | 5 |
| PORTBLAKELY-PSP- | 2.9 | 2 | 1 | 1 |
| RNZ-PRET-SOUTHLAND | 5.9 | 25 | 13 | 8 |
| TLL-PSP- | 3.8 | 65 | 33 | 22 |









- 
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- Approvals
- My flows
- Create
- Templates
- Connectors
- Data
- Solutions
- Learn



Survey123

Sorted by popularity



All flowsFeaturedShared with meApprovalButtonData collectionVisioEmailEvents and calendarMobile...





Notify me when a new survey response is submitted in Survey123
By Microsoft
Automated712





Track Survey123 responses in Excel Online (Business) sheet
By Microsoft
Automated130





Send an email and create an event on superstop notifications in Survey123
By Microsoft Flow Community
Automated120






Track Survey123 responses in a SharePoint list
By Microsoft
Automated86





Track Survey123 responses in Google Sheets
By Microsoft
Automated83




Insert row in Excel when a survey response is submitted on Survey123
By Microsoft Flow Community
Automated63






Click a button to email published surveys from Survey123
By Microsoft
Instant61





Send email from Gmail when a new response is submitted in Survey123
By Microsoft Flow Community
Automated50





 Home



 Action items 


 My flows


 Create

 Templates

 **Connectors**

 Data 

 Solutions

 Learn

Power Platform

 Survey123

All connectors 

Recently added connectors





Survey123


All connectors






Survey123


 Flow





 Home



 Action items 


 My flows


 Create







 Templates

 **Connectors**

 Data 


 Solutions


 Learn




Survey123

Survey123 for ArcGIS is a simple and intuitive form-centric data gathering solution that makes creating, sharing, and analyzing surveys possible in just three easy steps: 1) Ask Questions; 2) Get the Answers; 3) Make the best Decisions.












 [See documentation](#)

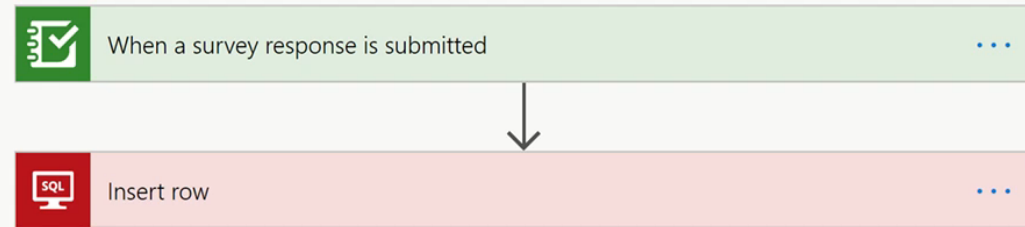


Triggers - A trigger is an event that starts a flow



When a survey response is submitted

- 
-  Home
 -  Approvals
 -  My flows
 -  Create
 -  Templates
 -  Connectors
 -  Data 
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+ New step

Save

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Webhooks

Webhooks allow external services to be notified when certain events happen within your survey. For example, when a new record is submitted to your survey, a webhook can trigger an email notification through a mail server. For more information, please see [Getting started with webhooks in Survey123](#).

[Add webhook](#)

| Name | Last modified | Status | Operations |
|--|-------------------------|--------|---|
| MicrosoftFlow-58b84ded5d8043a3b59401a6e1bd8ff5 | Apr 9, 2019, 3:20:18 PM | On |   |

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Webhooks

Edit webhook

A POST request will be sent to the payload URL below with selected details of any subscribed events.

Name *

Payload URL *

Trigger events



New record submitted



Existing record edited

Event data

Include following information in the payload



Survey info ?



Server response ?



Submitted record ?



User info ?



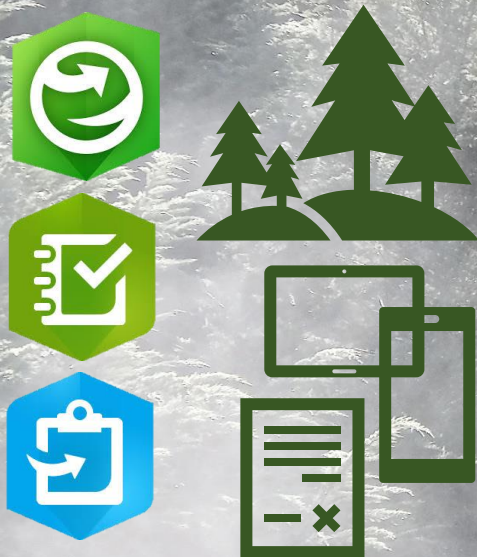
Portal info ?

Status



On

Field Mobility



Operations Dashboards
and Maps



Organizational Databases
and Reporting



esri

Partner Network
Silver



Office 365
Microsoft Partner



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QUESTIONS



INSIGHTS

See What Others Can't

Field Mobility to Organizational Data Workflows

Integrating Field Apps, Operations Dashboards, into Organizational Data Flows – Foresters Perspective

David Herries
Director / GM



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